

CLAIMS

1. Electromechanical motor, comprising:
 - stator, having a driving element and a backbone portion; and
 - 5 body to be moved in a main displacement direction by said driving element interacting with said body;
 - said driving element having two electromechanical sections extended in a main extension direction essentially parallel to said main displacement direction and being connected to said backbone portion;
 - 10 said two electromechanical sections being excitable in a vibration mode with strokes substantially perpendicular to said main displacement direction;
 - said two electromechanical sections being interconnected with each other at respective first ends via a link member;
 - 15 said link member having a single actuating portion for said interacting with said body;
 - at least one of:
 - respective joints between said link member and said
 - 20 respective first ends; and
 - a portion of said link member,
 - having a portion of significantly lower bending stiffness than a bending stiffness of said two electromechanical sections, in the direction of said strokes.
- 25 2. Electromechanical motor according to claim 1, wherein said two electromechanical sections are connected to said backbone at respective connection points closer to a respective second end of said two electromechanical sections than said respective first ends, said respective
- 30 second ends being essential opposite to said respective first ends.
3. Electromechanical motor according to claim 2, wherein said connection points being essentially immovable with respect of the main part of said backbone portion.

4. Electromechanical motor according to claim 3, wherein said two electromechanical sections being rigidly connected at positions substantially at said respective second end.

5. Electromechanical motor according to claim 1, wherein said portion of significantly lower bending stiffness comprises a section with reduced dimension in the direction of said strokes compared with said two electromechanical sections.

6. Electromechanical motor according to claim 1, wherein said portion of significantly lower bending stiffness comprises a section with a softer material than in said two electromechanical sections.

7. Electromechanical motor according to claim 1, wherein said link member comprises one rigid member connected by two said portions of significantly lower bending stiffness, said actuating portion being arranged in the middle of said rigid member.

8. Electromechanical motor according to claim 1, wherein said link member comprises two rigid members connected by a first bendable section, said actuating portion being arranged on or in vicinity of said first bendable section.

9. Electromechanical motor according to claim 8, wherein said portions of significantly lower bending stiffness are constituted by a second and a third bendable section, respectively, between said rigid members and said electromechanical sections.

10. Electromechanical motor according to claim 9, wherein said link member further comprises rigid levers between said second and third bendable sections, respectively, and said electromechanical sections.

11. Electromechanical motor according to claim 10, wherein said rigid levers, rigid members and/or bendable sections are made by a metal plate provided with bending notches or holes.

5 12. Electromechanical motor according to claim 1, wherein said electromechanical sections are selected from the group of bimorph sections, monomorph sections and multimorph sections.

10 13. Electromechanical motor according to claim 1, further comprising resilient means arranged to apply a normal force between said driving element and said body.

14. Electromechanical motor according to claim 2, wherein said connection points are situated on the side of the driving element.

15 15. Electromechanical motor according to claim 2, wherein said connection points are on top or bottom of the driving element.